



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,775	12/02/2003	Cheng-Yin Lee	ALC 3100	1920
30868 7590 05/12/2009 KRAMER & AMADO, P.C. 1725 DUKE STREET SUITE 240 ALEXANDRIA, VA 22314				
EXAMINER				
MILLS, DONALD L				
ART UNIT		PAPER NUMBER		
2416				
MAIL DATE		DELIVERY MODE		
05/12/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Continuation of 3. NOTE:

Regarding claims 1 and 9, the extensive modifications (as seen below) to the claims change their scope; therefore, the Examiner is required to perform an updated search.

1. (Currently Amended) A redundant hub-spoke virtual private LAN (VPN) having a plurality of emulated LANs (ELANs), each connected at a provider edge (PE) node over a service provider network, comprising:

a first hub node serving client equipment (CE) devices connected on a first ELAN, connected at a first of said PE nodes, capable of performing as a root bridge node of the VPN;

a spoke node connected to a second of said PE nodes, serving CE devices on a second ELAN;

a first point-to-point link L1 for interconnecting said first hub node and said spoke node;

means for detecting a failure of said first point-to-point link L1, and for transmitting a corresponding failure notice;

a second hub node connected to a third of said PE nodes, interconnected with said first hub node through said service provider network and said first and third PE nodes; and

means for establishing a redundant point-to-point link L2 from said second hub node to said spoke node in response to said failure notice

wherein said first PE node and said second PE node are capable of connecting through said service provider network to form a first point-to-point link L1 interconnecting said first hub node and said spoke node,

wherein at least one of said first, second and third PE nodes is capable of detecting a failure associated with said first hub node and, in response to said detecting, of sending a failure notice,

wherein said third PE and said second PE are capable, in response to said failure notice, of establishing a redundant point-to-point link L2 through said service provider network, L2 interconnecting said second hub node and said spoke, and

wherein, in response to said failure notice, said second hub node is capable of performing as the root bridge node of the VPN.